

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333173-930

Luminaire Tested: **S125DIP-S610D590U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333173-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D590U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3626.0 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

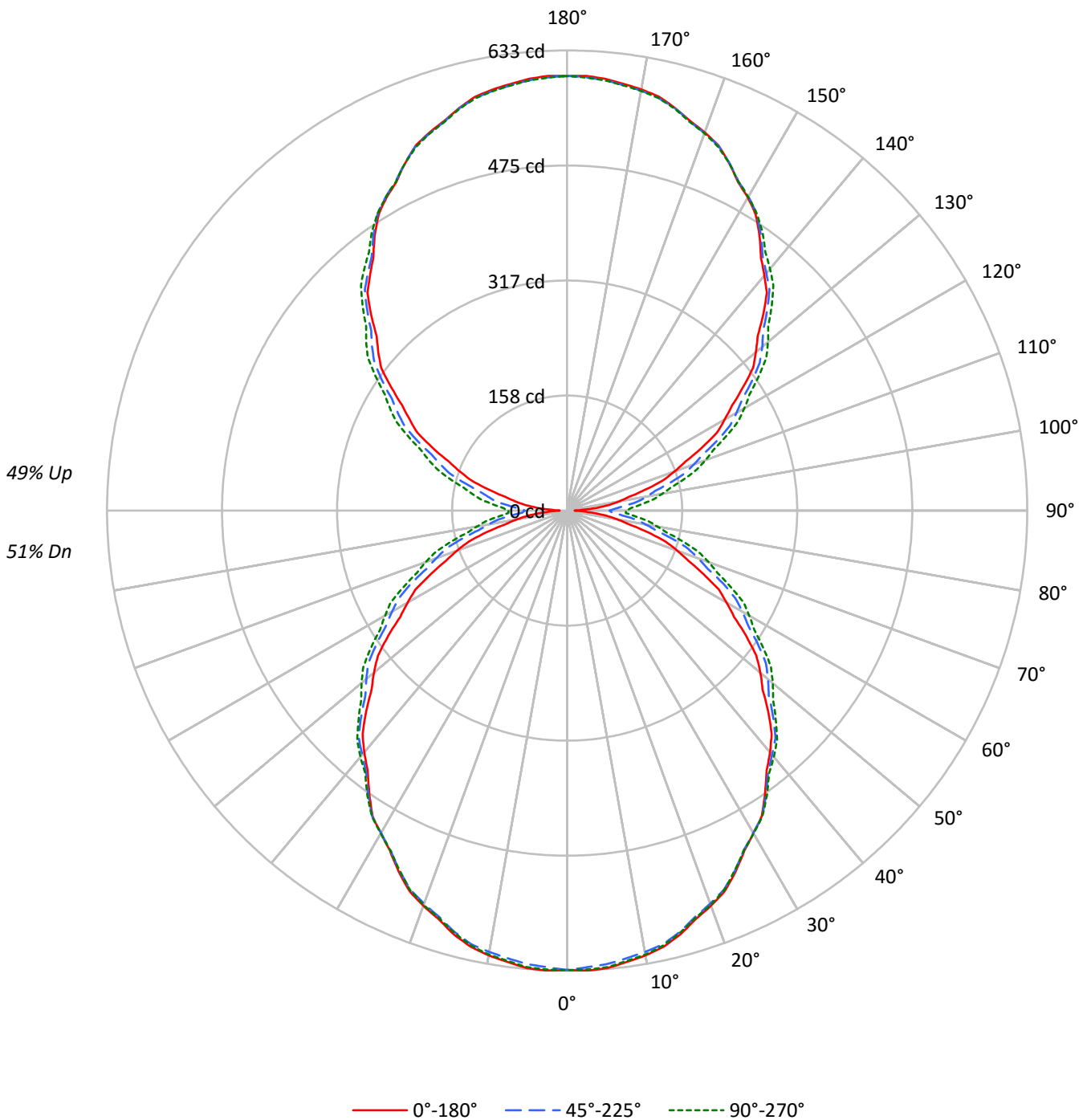
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	89	85	82	79	72	70	67	60	58	56	49	48	46	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	40	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21
6	62	49	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.6
10°-20°	169.6	4.7
20°-30°	252.2	7.0
30°-40°	298.8	8.2
40°-50°	308.9	8.5
50°-60°	284.6	7.8
60°-70°	230.0	6.3
70°-80°	154.0	4.2
80°-90°	81.2	2.2
90°-100°	84.9	2.3
100°-110°	151.3	4.2
110°-120°	222.4	6.1
120°-130°	276.1	7.6
130°-140°	300.7	8.3
140°-150°	290.5	8.0
150°-160°	243.1	6.7
160°-170°	161.6	4.5
170°-180°	56.5	1.6
0°-30°	481.6	13.3
0°-40°	780.4	21.5
0°-60°	1373.8	37.9
0°-90°	1839.1	50.7
90°-120°	458.5	12.6
90°-150°	1325.8	36.6
90°-180°	1787.0	49.3
0°-180°	3626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	10	34	58	74	81	8
95°	38	56	81	97	103	39
105°	112	124	145	160	166	119
115°	204	211	227	238	241	202
125°	295	298	310	319	322	264
135°	382	384	389	396	398	294
145°	462	463	464	467	468	288
155°	527	527	528	530	527	243
165°	574	573	573	575	572	162
175°	596	594	594	597	594	57
180°	598	598	598	598	598	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.4	24.0	28.5	33.1	37.7	42.4	47.2	52.0	56.9	61.7	65.0
90°	10.4	15.6	20.9	26.1	31.3	36.6	42.0	47.5	52.8	58.2	61.9
92.5°	20.1	24.9	29.5	34.2	38.8	43.9	49.7	55.3	61.0	66.7	70.4
95°	38.3	42.1	45.8	49.7	53.4	58.2	63.9	69.6	75.3	81.0	84.8
97.5°	57.6	60.8	64.2	67.4	70.8	75.4	81.3	87.2	93.2	99.1	102.7
100°	71.9	74.8	77.7	80.6	83.5	87.8	93.6	99.3	105.1	110.8	114.6
102.5°	87.4	90.5	93.6	96.7	99.8	103.8	108.8	113.7	118.7	123.7	127.5
105°	111.6	114.3	117.1	119.8	122.5	126.2	131.0	135.7	140.5	145.2	148.6
107.5°	138.4	140.8	143.2	145.6	148.0	151.4	155.8	160.3	164.7	169.2	172.2
110°	156.9	159.1	161.3	163.4	165.6	168.8	172.9	177.1	181.2	185.4	188.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	176.3	177.8	179.4	181.0	182.6	185.5	189.6	193.7	197.9	202.0	204.6
115°	204.2	205.5	206.9	208.3	209.7	212.3	216.1	219.8	223.6	227.4	229.8
117.5°	232.2	233.0	233.8	234.6	235.5	237.7	241.2	244.8	248.4	252.0	254.4
120°	250.1	251.0	251.9	252.8	253.8	255.9	259.2	262.4	265.7	269.0	271.3
122.5°	268.9	269.3	269.7	270.0	270.4	272.3	275.7	278.9	282.3	285.6	287.7
125°	295.1	295.5	296.0	296.4	296.9	298.6	301.5	304.4	307.2	310.1	312.0
127.5°	322.3	322.5	322.8	322.9	323.2	324.5	326.9	329.2	331.6	334.0	335.9
130°	339.1	339.4	339.8	340.2	340.6	341.9	344.0	346.1	348.2	350.3	352.2
132.5°	355.3	356.1	356.9	357.8	358.6	359.7	361.2	362.6	364.0	365.5	367.3
135°	381.7	382.2	382.6	383.1	383.6	384.4	385.5	386.5	387.6	388.7	390.4
137.5°	406.5	407.0	407.5	408.0	408.5	409.0	409.8	410.4	411.2	411.8	413.6
140°	422.0	422.5	423.1	423.5	424.0	424.5	425.0	425.4	425.9	426.3	428.0
142.5°	438.0	438.3	438.6	439.0	439.3	439.7	440.1	440.5	440.9	441.3	442.8
145°	461.5	461.8	462.1	462.4	462.7	462.9	463.3	463.6	463.9	464.1	464.9
147.5°	482.7	482.9	483.1	483.4	483.6	483.8	484.0	484.4	484.6	484.9	485.3
150°	497.2	497.1	497.0	496.9	496.8	496.9	497.3	497.7	498.1	498.6	498.6
152.5°	509.1	509.2	509.4	509.6	509.6	509.8	510.0	510.1	510.3	510.5	510.8
155°	527.4	527.4	527.4	527.4	527.4	527.5	527.6	527.7	527.8	527.9	528.3
157.5°	543.8	543.6	543.3	543.2	542.9	542.8	542.9	543.1	543.2	543.2	543.6
160°	553.5	553.2	552.9	552.5	552.2	552.1	552.2	552.4	552.4	552.5	552.9
162.5°	562.1	561.8	561.6	561.3	561.1	561.0	561.0	561.1	561.1	561.1	561.6
165°	573.5	573.2	573.1	572.8	572.7	572.6	572.7	572.8	572.9	573.0	573.4
167.5°	583.2	582.8	582.3	581.9	581.5	581.3	581.3	581.3	581.3	581.3	581.9
170°	588.3	587.9	587.5	587.1	586.7	586.5	586.5	586.5	586.5	586.5	587.1
172.5°	592.1	591.7	591.3	590.8	590.4	590.2	590.2	590.2	590.2	590.2	590.8
175°	596.2	595.8	595.4	595.0	594.6	594.4	594.4	594.4	594.4	594.4	595.0
177.5°	598.4	598.1	597.8	597.5	597.0	596.9	596.8	596.7	596.6	596.6	597.0
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	68.2	71.5	74.8	77.0	77.9	79.0	80.0	81.0
90°	65.6	69.3	73.0	75.4	76.7	78.0	79.2	80.6
92.5°	74.1	77.9	81.6	84.1	85.3	86.5	87.6	88.9
95°	88.5	92.3	96.0	98.5	99.7	100.9	102.0	103.2
97.5°	106.3	109.9	113.4	115.8	116.8	117.9	119.0	120.0
100°	118.5	122.3	126.1	128.5	129.6	130.6	131.6	132.6
102.5°	131.3	135.1	138.8	141.4	142.4	143.6	144.7	145.8
105°	152.0	155.3	158.7	161.0	162.3	163.6	164.9	166.2
107.5°	175.2	178.2	181.3	183.2	184.0	184.9	185.7	186.5
110°	191.3	194.2	197.1	199.0	199.8	200.7	201.5	202.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	207.3	209.9	212.6	214.3	215.1	215.9	216.6	217.4
115°	232.2	234.6	236.9	238.5	239.2	239.9	240.6	241.3
117.5°	256.8	259.3	261.6	263.1	263.7	264.2	264.7	265.2
120°	273.6	276.0	278.3	279.7	280.1	280.5	281.0	281.4
122.5°	289.9	292.0	294.2	295.5	296.0	296.5	297.0	297.5
125°	314.1	316.0	318.0	319.4	319.9	320.5	321.1	321.6
127.5°	337.9	339.8	341.7	343.0	343.6	344.1	344.8	345.4
130°	354.0	355.9	357.7	358.8	359.3	359.8	360.3	360.8
132.5°	369.2	371.0	372.8	373.8	374.1	374.5	374.7	375.0
135°	392.2	394.0	395.8	396.9	397.1	397.4	397.7	397.9
137.5°	415.3	417.1	418.8	419.7	419.7	419.8	419.8	419.9
140°	429.8	431.5	433.3	434.1	434.1	434.1	434.2	434.2
142.5°	444.2	445.6	447.0	447.8	447.8	447.8	447.8	447.9
145°	465.5	466.3	466.9	467.4	467.7	467.9	468.1	468.4
147.5°	485.8	486.2	486.7	486.7	486.2	485.8	485.3	484.9
150°	498.6	498.6	498.6	498.6	498.5	498.4	498.4	498.3
152.5°	511.0	511.3	511.5	511.4	511.1	510.8	510.4	510.1
155°	528.7	529.1	529.5	529.5	529.0	528.5	527.9	527.4
157.5°	544.0	544.5	544.9	544.8	544.0	543.4	542.7	542.0
160°	553.3	553.8	554.2	554.2	553.7	553.1	552.6	552.1
162.5°	562.1	562.6	563.1	563.0	562.5	561.8	561.3	560.6
165°	573.8	574.2	574.7	574.5	574.0	573.3	572.7	572.1
167.5°	582.5	583.2	583.8	583.8	583.1	582.4	581.8	581.2
170°	587.7	588.3	589.0	588.9	588.2	587.5	586.8	586.0
172.5°	591.5	592.1	592.7	592.7	592.1	591.4	590.8	590.1
175°	595.7	596.2	596.9	596.8	596.1	595.4	594.7	593.9
177.5°	597.5	598.0	598.5	598.5	597.9	597.4	596.7	596.1
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7

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